

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph at page 4, line 21, with the following rewritten paragraph:

According to the first aspect of the present invention, there is provided a broadcast channel change detection apparatus comprising a detection means device. The detection means device receives a broadcast wave including channel change information that includes a change date and time of a physical channel of the broadcast wave and physical channels before and after the change, and searches and detects channel change plan information that includes the change date and time regarding the physical channel to be changed in a television receiver apparatus and the physical channels before and after the change, based on the channel change information.

Please replace the paragraph at page 5, line 7, with the following rewritten paragraph:

According to the second aspect of the present invention, there is provided a broadcast channel change detection apparatus comprising: a first storage means device and a detection means device. The first storage means device previously stores channel preset information including a physical channel of a broadcast wave received by a television receiver apparatus. The detection means device receives the broadcast wave including channel change information that includes a change date and time of the physical channel of the broadcast wave and physical channels before and after the change, and searches and detects channel change plan information that includes the change date and time regarding the physical channel to be changed in said television receiver apparatus and the physical channels before and after the change, based on the channel preset information and the channel change information.

Please replace the paragraph at page 5, line 20, with the following rewritten paragraph:

In the above-mentioned broadcast channel change detection apparatus, the broadcast channel change detection apparatus further includes a judgment means device.

The judgment ~~means~~device receives the broadcast wave on the physical channel after the change in the channel change plan information, and judges whether or not the broadcast wave is actually receivable based on the detected channel change plan information, when the change date and time in the channel change plan information is older than or equal to a current date and time. In this case, the judgment ~~means~~device stores the physical channels before and after the change regarding the broadcast wave that is actually receivable, in a second storage ~~means~~device as a channel shift list.

Please replace the paragraph at page 6, line 7, with the following rewritten paragraph:

In addition, in the above-mentioned broadcast channel change detection apparatus, the broadcast channel change detection apparatus further includes a notification-~~means~~device. The notification ~~means~~device notifies a user of information of the stored channel shift list. Alternatively, in the above-mentioned broadcast channel change detection apparatus, the broadcast channel change detection apparatus further includes an update-~~means~~device. The update ~~means~~device updates the channel preset information including the physical channel of the broadcast wave received by the television receiver apparatus, based on the information of the stored channel shift list.

Please replace the paragraph at page 6, line 17, with the following rewritten paragraph:

Further, in the above-mentioned broadcast channel change detection apparatus, the broadcast channel change detection apparatus further includes a notification-~~means~~device. The notification ~~means~~device notifies a user of the detected channel change plan information. Alternatively, in the above-mentioned broadcast channel change detection apparatus, the broadcast channel change detection apparatus further includes an update ~~means~~device. The update ~~means~~device updates the channel preset information including the physical channel of the broadcast wave received by the television receiver apparatus, based on the detected channel change plan information.

Please replace the paragraph at page 7, line 3, with the following rewritten paragraph:

According to the third aspect of the present invention, there is provided a recording apparatus including the above-mentioned broadcast channel change detection apparatus, and a recording means device. The recording means device receives the broadcast wave, and records video and audio signals of the received broadcast wave.

Please replace the paragraph at page 7, line 8, with the following rewritten paragraph:

In the above-mentioned recording apparatus, the recording apparatus further includes ~~control means~~ a controller. The ~~control means~~ controller judges whether or not a physical channel after the change is present based on the channel change plan information upon executing a reserved recording process, receives the broadcast wave on the physical channel after the change in the channel change plan information and judging whether or not the broadcast wave is actually receivable when the physical channel after the change is present, and executes the recording process when the broadcast wave is actually receivable. In this case, the ~~control means~~ controller notifies a user that the recording process failed when the broadcast wave is actually non-receivable.

Please replace the paragraph at page 7, line 19, with the following rewritten paragraph:

In the above-mentioned recording apparatus, the recording apparatus further includes ~~control means~~ a controller. The ~~control means~~ controller judges whether or not a physical channel after the change is present based on the channel shift list upon executing a reserved recording process, receives the broadcast wave on the physical channel after the change in the channel shift list and judging whether or not the broadcast wave is actually receivable when the physical channel after the change is present, and executes the recording process when the broadcast wave is actually receivable. In this case, the ~~control means~~ controller notifies a user that the recording process failed when the broadcast wave is actually non-receivable.

Please replace the paragraph at page 9, line 4, with the following rewritten paragraph:

In addition, when the change date and time in the channel change plan information is older than or equal to the current date and time, the broadcast channel change detection apparatus receives the broadcast wave on the physical channel after the change in the channel change plan information, and judges whether or not the broadcast wave is actually receivable based on the detected channel change plan information. Then, the broadcast channel change detection apparatus stores the physical channels before and after the change regarding the broadcast wave that is actually receivable in the second storage ~~means~~device as the channel shift list. Therefore, it is possible to confirm whether or not the broadcast wave on the broadcast channel is actually receivable when the broadcast channel change is detected.

Please replace the paragraph at page 11, line 19, with the following rewritten paragraph:

Referring to Fig. 1, a broadcast wave is received by a broadcast wave tuner circuit 110 via an antenna 10A. The broadcast wave tuner circuit 110 executes processings, such as low noise amplification, frequency conversion, intermediate frequency amplification, and demodulation and the like, on a radio signal on the received broadcast wave. The broadcast wave tuner circuit 11 extracts from the radio signal into video and audio signals, and outputs the video and audio signals to a video signal processing circuit 11 and an audio signal processing circuit 12, respectively. The video signal processing circuit 11 executes signal processings such as descrambling and decoding on the inputted video signal, and then, outputs the resultant video signal to an RGB processor 13 and a DVD recorder 17. The audio signal processing circuit 12 executes processings such as descrambling and decoding on the inputted audio signal, and then, outputs the resultant audio signal to each of an amplifier 15 and the DVD recorder 17. The RGB processor 13 combines the video signal from the video signal processing circuit 11 with a video signal from a video signal generator circuit 18. Then, the RGB processor 13 converts the combined video signal into an RGB signal, and outputs the RGB signal to a display 14 such as a liquid crystal display to display the RGB

signal on the display 14. The amplifier 15 combines audio signals on two channels from the audio signal processing circuit 12, with audio signals on two channels from an audio signal generator circuit 19. Then, the amplifier 15 amplifies powers of the combined audio signals on the two channels, and outputs the audio signals on the two channels to two loudspeakers 16A and 16B, respectively. Further, based on a control signal from the apparatus controller 20, the DVD recorder 17 records the inputted video and audio signals on an optical disk such as a DVD, a CD-RW, or the like. On the other hand, the DVD recorder 17 reproduces the video and audio signals stored in the optical disk.

Please replace the paragraph at page 13, line 6, with the following rewritten paragraph:

The apparatus controller 20 controls operation of an entire television receiver 100 including the DVD recorder 17. It is noted that a clock circuit 21, a keyboard 22, an infrared signal receiver circuit 23, and a data memory 30 are connected to the apparatus controller 20. In addition, the clock circuit 21 counts a current date and time, and outputs data on the current date and time to the apparatus controller 20. The clock circuit 21 may correct the counted current date and time based on current date and time information, for example, included in a broadcast wave, or based on current date and time information received via a communication line such as the Internet or the like. Further, the apparatus controller 20 may use the current date and time information, for example, included in the broadcast wave without processing the current date and time information. As described later in detail, the data memory 30 includes various tables 31 to 36 and a temporary memory 37 for temporarily saving and storing various types of data. Data and instruction information inputted by a user with the keyboard 22 are inputted to the apparatus controller 20. An infrared signal, which includes a remote control message, and which is inputted from an infrared transmitter section 40A of a remote controller 40 that remotely controls operation of the television receiver apparatus, is received and decoded by the infrared signal receiver circuit 23. The decoded data is inputted to the apparatus controller 20.

Please replace the paragraph at page 31, line 14, with the following rewritten paragraph:

Furthermore, when the change date and time in the channel change plan information is older than or equal to the current date and time, the broadcast wave on the physical channel after the change in the channel change plan information is received. Then, it is judged whether or not the broadcast wave is actually receivable. In addition, the physical channels before and after the change regarding the broadcast wave that is actually receivable are stored in the second storage means—device as the channel shift list. Therefore, it is possible to confirm whether or not the broadcast wave on the broadcast channel is actually receivable when the broadcast channel change is detected.

Please replace the paragraph at page 34, line 7, with the following rewritten paragraph:

(1) The change plan information is previously known even before the change from the data in the channel shift list table 35. Therefore, an alarm message for the information may be notified to the user by displaying or speech outputting at setting of a reservation so that the user may be notified that there is a probability of failure of reservation to be set at the execution of the reservation since there is a probability of frequency change. Alternatively, the entire data stored in ~~the channel change plan information~~ 32—the channel shift list table 35 may be notified to the user.

Please replace the paragraph at page 36, line 22, with the following rewritten paragraph:

Furthermore, when the change date and time in the channel change plan information is older than or equal to the current date and time, the broadcast channel change detection apparatus receives the broadcast wave on the physical channel after the change in the channel change plan information, judges whether or not the broadcast wave is actually receivable based on the detected channel change plan information, and stores the physical channels before and after the change regarding the broadcast wave that is actually receivable in the second storage means—device as the channel shift list.

Therefore, it is possible to confirm whether or not the broadcast wave on the broadcast channel is actually receivable when the broadcast channel change is detected.